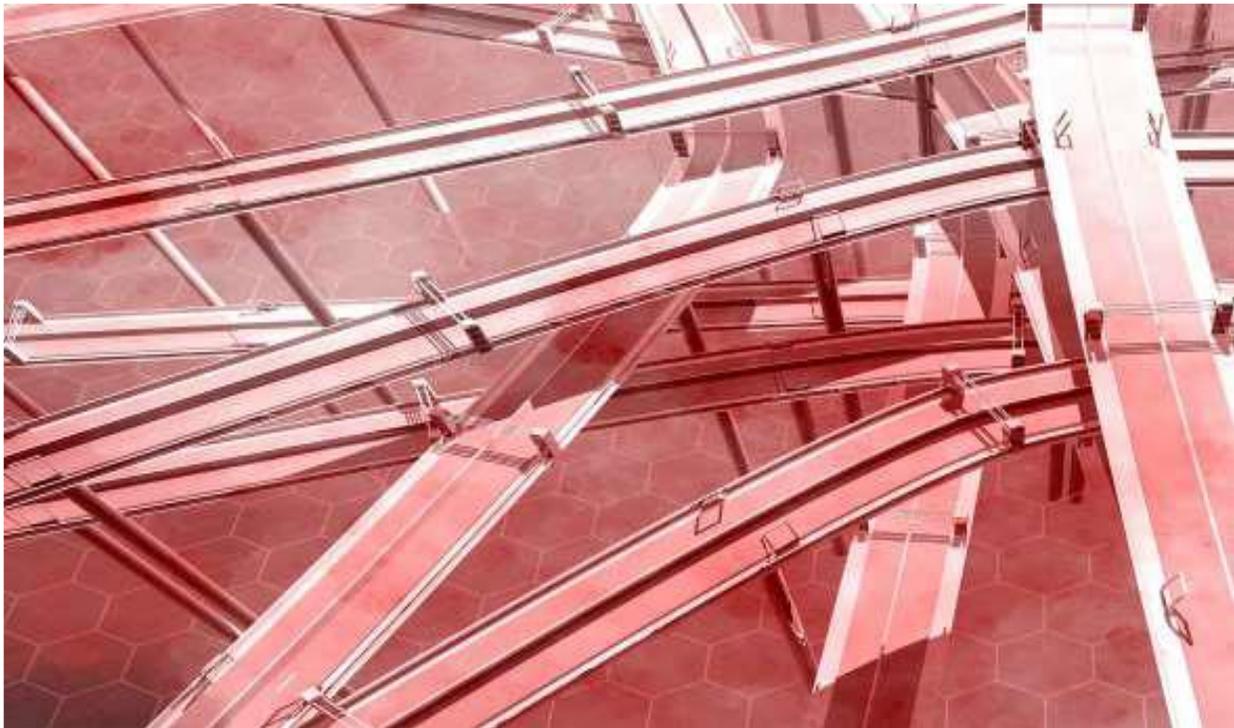


**RECREATE**  
**REinforce Competitiveness of REgionAI  
Transport SMEs**  
**PGI05275**  
**Lithuania Thematic Workshop & Study Visit  
Report**



Lithuanian Innovation Center

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## 1. Introduction

On the 2<sup>nd</sup> and 4<sup>th</sup> of February 2021 a Thematic online Workshop and a Study Visit have been organised in Lithuania by the Lithuanian Innovation Center (LIC). A total of 35 people participated to the activities between representatives of the four Project Partner organisations and their stakeholders from academic, business and government sectors. The event was attended by the 26 participants in the first day (2<sup>nd</sup> of February) and 22 people on the second day (4<sup>th</sup> of February).

The focus of this workshop and study visit was on SMEs opportunities for 'Collaborations'. Taking this into account, invited guest speakers to introduce Lithuanian good practices were from various types of organisations, including business associations, clusters, universities and venture capital funds.

## 2. First day (2<sup>nd</sup> February 2021)

The first day was split into two different sections. First of all, four presentations were delivered, three of which were dedicated to introduce partners and their stakeholders with the Lithuanian transport sector and its good practices. The second part of the meeting was dedicated to discuss the current situation of collaboration in project partners regions.

The first presentation was delivered by a representative of Lead Partner CUE Ltd (Giuliana Famiglietti Pipola) about the **RECREATE project**. This presentation gave a general overview about the project, its aim and specific objectives, regions and organisations involved, the main expected results and outputs, as well as the stakeholders' role. Ms. Famiglietti Pipola informed partners and stakeholders that project partners were currently working on the Good Practices Handbook and that the document would be finalised in the nearest future. She also introduced the upcoming activities, such as the preparation of Regional Policy Recommendations and Joint Policy Recommendations Report, Action plans, stakeholder meetings and the Interregional policy workshop as well as the last study visit, which will be hosted in South Aegean Region.

### 2.1. First introduction of Lithuanian Good Practices

The second presentation of the meeting was delivered by a representative of Lithuanian Innovation Center (Povilas Bacevičius). The main idea behind this presentation was to give a very brief introduction to project partners and stakeholders about the Lithuanian transport and mobility sector, its innovation policy and the situation of collaboration.

Lithuania is a country with a population of around 2,8 million. While it is one of the fastest growing economies in the whole EU, some of its priority economic sectors include manufacturing, fintech, ICT, life sciences, transport and logistics.

Regarding the transport sector, these are some of its most important characteristics:

- In 2019, it accounted for around 14% of national GDP (best result in the EU27);
- The number of enterprises in this sector is growing (8,7 thous. companies in 2019);
- 99.3% of companies in the transport sector are SMEs and 77.9% of them are micro companies;
- It employs around 142 thous. people;

- Turnover is around €12,24 billion.

The Lithuanian automotive manufacturing segment is connected to the transport sector. Some of its features are:

- The growing number of enterprises in the sector (120 in companies in 2019 were manufacturing motor vehicles, trailers, semi-trailers and other transport equipment);
- It generated around 3% of all manufacturing output in Lithuania;
- It employs around 10 thous. people.

ICT and transport solution providers is another important segment:

- There are around 3 thous. ICT companies in Lithuania and they employ around 28 thous. employees (there is no data about how many of them are related to transport);
- Some of the companies include Ruptela, Terra IT, CityBee, Trafi.

Transport and mobility trends in Lithuania are quite similar compared to other European countries and regions. First of all, environmental issues and green policy, especially in the context of EU Green Deal are very important. Transport accounts for around 28% of GHG emissions and there is a need to reduce this number. Therefore, transport electrification, alternative fuels and circular economy are gaining more attention than even before. Another important trend is digitisation. Transport digitisation is another important topic. Lithuania highly prioritises Industry 4.0, so Logistics 4.0 is another upcoming topic in order to connect production, logistics and transportation. Future mobility is also highly important, while MaaS and alternative ways of traveling are gaining more popularity, especially in bigger cities. Last but not least, transport safety is also a top priority – the government is committed to reduce the number of road deaths to 0 by 2050.

Lithuanian innovation ecosystem is defined by the Lithuanian Smart Specialization Strategy (S3) and Lithuanian Operational Programme (OP) 2014 – 2020. Regarding the S3, Lithuania has 7 priorities, one of which is directly dedicated to transport:

- Smart, clean, integrated (linked) transport
  - Intelligent transport systems
  - Technologies (models) for the management of international transport corridors and the integration of transport modes

Regarding the OP, these are two main priorities, mostly related to innovation and collaboration:

- Priority 1: Strengthening research and development and innovation
- Priority 3: Promoting competitiveness of small and medium-sized business

During the presentation, examples of support measures were also introduced:

- Intelektas. Bendri verslo-moklso projektai:
  - Form: non-repayable grant (up to €3,000,000)
  - Funded activities: R&D activities; initial investment by enterprises to expand or develop R&D and innovation infrastructure; certification of new products and related activities
- Inostartas:
  - Form: non-repayable subsidy (up to 85% of the project value)

- Funded activities: R&D activities carried out by innovative SMEs; recruitment of researchers and scientists; enterprise development through R&D
- Expo sertifikatas LT:
  - Form: non-repayable subsidy (up to 85 % of the project value)
  - Funded activities: R&D activities carried out by innovative SMEs; recruitment of researchers and scientists; enterprise development through R&D

Lithuanian business cluster and associations related to transport were also introduced, including:

- Lithuanian Automotive Export Association (LAuGEA);
- Baltic Automotive Components Cluster (BACC);
- Lithuanian engineering industry association (LINPRA);
- Lithuanian National Road Carriers Association (LINAVA)

Last, but not least, Lithuania start-ups ecosystem was presented. In Lithuania there are around 1 thous. start-ups in total, yet only around 30 of them operate in mobility / logistics / vehicle production segments. Despite this low number, there is a quite broad start-ups support ecosystem:

- Governmental support (Startup Lithuania, Enterprise Lithuania, Agency of Science, Innovation and Technology, LIC);
- Pre-accelerators / Accelerators (Startup Wiseguys, Futurepreneurs, GovTech Lab);
- Local investors (Coinvest Capital, Lithuanian Business Angels Network, Iron World Capital);
- Incubators / Hubs (Mobility Innovation Center, Balfab, Klaipėda Science and Technology Park)

After the presentation dedicated to introduce Lithuanian transport ecosystem, the first Lithuanian Good Practice was introduced. Julius Norkūnas, the CEO of Mobility Innovation Center (MIC) introduced his organisation and its activities.

Mobility Innovation Center is a quite interesting organisation regarding its structure. It was created by the Ministry of Transport and Communications together with three shareholders, that are supervised by this ministry: Lithuanian Post, Lithuanian Railways and Lithuanian Road Maintenance. As a result, it is a great example of the collaboration among public sector institutions, which aim to promote innovation in the transport sector.

The Organisation also has a wide range of functions and activities, including:

- Problem solving – identification of transport sector challenges and search for solutions
- Innovation transfer – passing the solution for the transport and communications sector companies
- Sandbox – access to infrastructure for testing and development for technologies
- Sector promotion – representation of the transport and communications sector during events, their organisation, accumulation of information and statistics of the sector
- Investments proposals – recommendation to the centre's stakeholders to invest in the solution providers

One of the most important features of this organisation is its challenge series during which it calls for startups, SMEs, corporates and other disruptive business ideas in order to solve public sector

issues. A Transport related public sector organisation presents their challenges and private companies can participate by offering their own solutions. Both sides in this process can win – the public sector can get the right solution to the problem and the private sector can develop new products, sign new contracts and further develop their operations. Some examples were presented:

- Dynamic route planning – the goal is to improve the already existing and used road status information system as it has some limitations. Winner will be awarded with a pilot contract (€10 000), it will be able to use the help of experts and scale the project across Europe;
- Last-mile delivery – the goal was to improve the last mile delivery by making it more efficient, faster and cheaper;
- Fleet management – the aim was to create a technical vehicles management system in which different departments could see the current and planned occupancy of all technical equipment, reserve the necessary mechanisms from other departments;
- Utilisation of railroad ties – the goal was to create a technology which would allow to utilise rail road ties in way larger amounts without any carbon footprint.

During the presentation, another innovative feature of this organisation was introduced, that is Innovation Sandbox. It is an open infrastructure initiative, providing free access to the infrastructure and data – enabling to test new technology solutions in real-life conditions. Using this sandbox, companies also can get mentorship support, collaboration with MIC partners, participate in various events, access more easily to venture capital and collaborate with other businesses.

Partnership and connections are also an important part of MIC. This institution brings together various players in innovation ecosystem and acts as a facilitator between universities, VCs, start-ups, corporates, hubs, associations, accelerators and incubators.

Last but not least, because MIC works with public sector institutions, public procurements is highly important topic. Therefore, MIC seeks to promote pre-commercial procurements (PCP), public procurements of innovation (PPI) and public procurements in general.

After this, the second Lithuanian Good Practice was presented by Viktorija Vaitkevičienė, the Managing Director of Coinvest Capital. She presented her organisation and the financial instrument related to transport sector, managed by them.

Coinvest Capital manages three different sub-funds, which can be used to finance businesses in all economic sector, all business development stages and SMEs. The objectives of these funds include the goal to increase the activities of private sector's R&D, further develop the venture capital funding environment, promote the development of an alternative market (First North), induce the enterprises to create mobility services and products. Coinvest Capital has a team of 6 people.

Coinvest Capital works closely with private investors. In order to participate in common projects, there has to be at least 3 business angels and they have to be the initiators of the investments. As a result, these private investors also benefit from this partnership, as they become more visible among other investors and start-ups, while the risk of investment is shared among more players.

Roles and exit strategy regarding this fund were also showed. It was mentioned that the fund acts as a silent investor in the company. Also, the fund can exit an investment no later than the private

investors. Last but not least, conditions for realising the investment can't be the same as for the private investors.

Investment conditions and investment process were also discussed. Businesses can receive up to €200 and €800 thous. according to various criteria, including business size, EU State Aid regulations. Private investors must also meet certain criteria, e.g. business angels have to be private companies or individuals, there must be at least three of them, there has to be 1 venture capital fund, purely financed from private resources. During the investment process, first of all private investors are selected, based on their financial capacities, experience, time and reputation. Selection of investment is the second stage, when business models, ideas and team are analysed. Last stage is negotiations at the end of which an investment agreement is signed. According to the current statistics, most investments were made to FoodTech, EnergyTech, AI, ICT and communication sectors.

Last, but not least, the Fund for Transport and Communication was introduced. This fund is financed from European Cohesion Fund and is worth around €4 million. This fund was initiated by the Ministry of Transport and Communications with the goal to pilot and test targeted support instrument for transport innovations. Only micro and small enterprises can get this funding, while the targeted investments portfolio is at least 4 companies. As this fund started only in the third quarter of 2019, it was used only in one case. Together with three other organisations, investment was made into the start-up "Inbalance grid". Start-up started its activities on 2019. Total investment was €950 thous., of which €600 was from the fund. Company operates in software and hardware for slow charging decision for electric vehicles and with the funding it managed to build some working stations near office building in Vilnius (Lithuania).

After the presentation, there were some comments regarding the development of venture capitals in partner regions. Participants noted the importance of venture capital in the context of COVID19 and slow economic growth, as support instrument such as subsidies and grants might not be so accessible in the upcoming future. Also, the question was raised about the tendency of venture capitals to concentrate on large cities or regions, thus leaving the periphery with fewer opportunities to develop innovative businesses. The representative of Coinvest Capital also noted this issue in Lithuania, by agreeing that most venture capital funds operate in the bigger cities. However, she also noted that most innovative companies and start-ups in Lithuania tend to open their businesses in bigger cities, so the issue is not so important as in other countries with bigger regions and disparities between them.

## 2.2. Workshop results – Current situation of Collaborations in Project Partners Regions

After the first part of the meeting, the following session was dedicated to discuss what is the current situation regarding collaboration in project partner regions. All participants, including project partners and their stakeholders were invited to participate in this discussion.

From the perspective of Lithuania, the first three presentations provided a bit of an overview about the situation and trends regarding cooperation in Lithuania, but the presentation on the second day will give an even better picture of the Country. Also, it was noted, that collaboration in Lithuania is quite important as companies tend to participate in various business clusters and associations, while some of them participate together with public sector institutions in joint

projects. However, the structure of various players in the field of transport is quite fragmented, while the situation regarding science and business cooperation could be improved.

Lead partners (CUE Ltd) and their stakeholders highlighted the fact that transport related businesses in the region mostly focus on the day-to-day activities, the current business issues and try to solve them using their own resources. As a result, there is a lack of strategic approach in the business management while the collaboration between different actors is not perceived as a priority. Therefore, the challenge in this region has been to stop businesses in their daily activities and try to make them think about what are the next steps in business development and what has to be done. There is a need to show companies, that collaboration with other transport related enterprises, universities, public sector organisations, research and technology institutions can be a next step which could help them achieve new goals.

The COVID-19 pandemic has also pushed businesses to look more at their internal strategies. In this scenario, businesses have started to look more for support, not just financial support, but also for improving and growing the business, while collaborations have become more important than before. Local collaboration is getting better between various players, and the local Growth Hub is the main player in this sphere. The Growth Hub brings together the main support organisations in the region and navigate businesses according to their needs. It acts as a system facilitator and the first positive results begin to show little by little.

Partners and stakeholders from the Aegean Region in Greece noted that collaboration between different actors in the sphere of transport sector is not sufficient yet. On the one hand, geographical aspects are a bit of a hindrance to collaboration, as the region is made up of a large number of small islands (52). On the other hand, hearing the experience of CUE Ltd and their stakeholders, partners from Greece noted that there is no facilitating organisation in the region, which would be dedicated to foster this process. The issues related to infrastructure are also very important, because the current infrastructure is outdated and its availability is also limited. To conclude, partners and stakeholder from Aegean region said, that most businesses in their region are SMEs and collaboration is a key component for their success. Partners believe that new strategies and the resources allocated to their implementation will change the situation for the better.

Last but not least, partners and stakeholders from the South-West Oltenia in Romania emphasised the importance and the tendency of digitisation. Businesses and especially SMEs have to adapt the latest digital solutions in their businesses in order to stay competitive in the market. At the same time, SMEs and especially micro companies are those who find it most difficult to do it. The problems faced by these businesses are mostly related to the choice of technologies (companies do not know what technologies they should invest in), search for sources of financing, lack of expertise. Therefore, collaboration have to play an important role in this process and encourage it. Taking this into account, Romanian partners emphasised the importance of facilitators and were very keen to know more about the financial instrument presented by the representative of Coinvest capital.

### 3. Second day (4<sup>th</sup> February 2021)

The second day was dedicated to present four more Good Practices from Lithuania regarding collaboration between different actors.

The first presentation was made by Aurimas Vasiliauskas, the founder of the company carVertical. This company is a success story, because now it is considered one of the most innovative companies in Lithuania. In 2018, they introduced their first product, the vehicle history report. They then became the first in the industry to receive some of the data in real time directly from cars. This was made possible through cooperation with the BMW Group.

Second Good Practice was the Association of Transport Innovation (TIA) and this organisation was presented by Jan Hyttel, one of the board members. This organisation was created due to several reasons. First of all, the transport sector has a high importance on Lithuanian economy, yet it is highly bureaucratic and not innovative. Second, international cooperation was low, while the initiatives to digitise the transport sector were fragmented. Last but not least, EU policy and new regulations also created a need to foster transport digitisation.

As a result, TIA was established in cooperation and partnership with various players in transport related segments, including Lithuanian public authorities, associations and non-governmental institutions, EU institutions, international partners, transport and logistics companies, innovation and technology companies, start-ups.

Understanding the issues and future challenges of the transport sector, TIA has a vision to lead innovations into transport and logistics and foster these sectors digital transformation by raising the awareness and understanding about this issue and by increasing the competitiveness of the sector in Lithuania and internationally. In order to do so, the organisation has a mission to create a business-friendly environment through digitisation and innovation.

Understanding the importance of collaboration, TIA is committed to foster cooperation between various actors in the sector. It acts as a facilitator and brings together various interest groups and stakeholders, public authorities and international organisations. Openness and effectiveness are the key values of this institution. TIA is always open for new ideas and partnerships, while it is also highly oriented towards solution that would highly impact transport and logistics sector effectiveness. Overall, these are the main five goals raised by the TIA:

- Create a community of transport and logistics innovators, who would generate, discover, test and implement new ideas towards digitisation and effectiveness;
- Develop a national Transport and Logistics Digitalisation Strategy in cooperation with public authorities. Also, set the regional ecosystem for the changes and implement EU regulation of eFTI;
- Expand the cooperation with EU institutions, West and East partnership countries in order to implement digital solutions in transport and logistics sector;
- Identify efficient solutions for logistics and customs procedures and enable all members of the association to use them;
- Create benefits and values of process effectiveness for big and small companies in the sector by increasing competitiveness of Lithuanian Transport and Logistics sector.

An important initiative implemented by the TIA was Digital Transport “Think tank”. This brings together associations, science institutions and public authorities with the goal to support the region and Lithuania to become the front runners in the digitisation and improve Lithuania’s role in the logistics chains. In order to do so, think tank initiated projects such as “Common mobility data space”, “Implementation of eCMR system”, “Digital authentication and digital signature systems integration”, Sandbox for transport innovation establishing (delivery drones, autonomous vehicles)” and others.

Also, in order to raise the awareness and most important questions related to the transport sector, TIA together with partners from “Infobalt” and the Ministry of Transport and Communications organised one of the biggest international events in the region “Transport Innovation Forum”. During the event, various discussions were held about transport innovations and digitisation, policy priorities, transport trends.

After the presentation, there was a short discussion about the importance of collaboration. Project partners noted, that TIA is a great example of a platform, which operates as a facilitator in the transport sector. Not only it connects various players in this sector, but at the same time it seeks to create innovative and digitised transport. The Organisation is future oriented and promotes future trends, so Lithuania can become the leader, not a follower in the transport digitisation area. A combination of different competencies and the sharing of knowledge will enable it.

The following presentation was about the Lithuanian Automotive Export Association (LAuGEA) and was delivered by Andrius Rakickas, Director. LAuGEA is a cross-sectoral business cluster, putting together Lithuanian companies related to the automotive industry and science representatives. The purpose of this cluster institution is to become the centre of research, development and export competences in the automotive sector.

Currently the cluster includes 27 different members, whose turnover is over €120 million, they employ about 1,700 employees and export to 93 different countries. Members of the cluster also offer a very wide range of different products – their assortment is around 175,000 products.

Regarding the added value created by the cluster, the members receive several benefits, including the network of Partners for international cooperation, marketing, workshops and practical trainings, the organisation of exhibitions, business missions and other events, experience in project development, cost groups.

LAuGEA not only connects various actors of the automotive sector, but it is also a member of the Lithuanian cluster network. This network operates as an intermediary and connects Lithuanian clusters into strong internationally visible network through cooperation and international participation. Even more, LAuGEA is also involved in a network of partners for international cooperation. For example, these include “Metal Processing Cluster”, “Logistics cluster”, “North Hungarian Automotive Cluster” and other clusters in the whole Europe.

LAuGEA is also an active player in the organisation of exhibitions, business missions and other events. They managed to organise more than 25 business missions to different exhibition and more than 30 C2C meetings.

The cluster has a lot of experience in the implementation of EU funded projects. For example, using the financial instrument “Business Cluster LT”, LAuGEA developed new export markets for cluster members by engaging in international chains. Using the financial instrument “Apprenticeship and Skills Improvement at the Workplace”, the cluster helped its members to improve their workforce skills. In order to promote the competitiveness of SMEs, they used “Business Cluster LT” instrument. Support through Innosup and BeeNet was used for search of international partners for innovative activities. Last but not least, the cluster also provides some support to its members for their individuals projects, so they could get financial support.

After the presentation, partners and stakeholders were interested to know more about the structure of the Lithuanian business support system. The representative of LAuGEA noted that the structure in Lithuania is quite complicated, and in some cases different organisations have same competencies. On the one hand, LAuGEA implements its own activities and projects in

order to help their members. These might include innovation or export support activities. Yet, in some cases the cluster acts only as a facilitator and using its knowledge and connections, it directs businesses to other support organisations (Agency of Science, Innovation and Technology or Lithuanian Innovation center regarding the innovation support or Enterprise Lithuania in case of export promotion). Another issue discussed was the funding of the cluster. It was noted that funds come from the cost of the memberships to be part of the Association and through the implementation of EU structural funds funded projects.

The last presentation was dedicated to the collaboration phenomenon from the science point of view and was delivered by Paulius Skačkauskas, the Vice-Dean of Vilnius Tech Faculty of Transport Engineering.

Regarding the studies in this faculty, it mostly focuses on four topics: traffic safety, transport economics, transport logistics and transport engineering (including automobile transport, automotive engineering, mobile machinery, railway transport). As a result, for the Bachelor's degree, the university offers study programs such as Automobile Transport Engineering, Automotive Engineering, Transport Economics, Transport Logistics and others; for the Master's degree, it offers study programs such as Supply Chain Management, Transport Logistics, Automobile Engineering, Automotive Engineering and others; for the PhD studies, it offers Transport Engineering and Management courses.

In case of Research, Innovation and Practical Activities, priority fields for the faculty are Sustainable transport. Therefore, these are the main research fields the faculty is concentrating on: autonomous ground vehicles, environmentally friendly transport, traffic safety, urban mobility and green logistics, transportation networks. To implement research in these fields, the university has five different faculties: Department of Automobile Engineering, Department of Logistics and Transport Management, Department of Mobile Machinery and Railway Transport, Transport and Logistics Competence Centre, Laboratory of Transport Engineering and Logistics.

Taking this into account, a representative of the faculty introduced some of the projects, which they are currently implementing. These include projects related to the development of autonomous vehicles, hot asphalt regeneration machine, the use of liquefied natural gas mixtures and hydrogen in transport, investigation of fuel mixtures, traffic safety and others. In addition, members of the faculty are also actively involved in some of national, international and other projects.

At the end of the presentation, some cases of science and business cooperation were introduced. The faculty provides services for private enterprises, using their own know-how and infrastructure. For example, together with a private company, the faculty worked on the creation of semi-autonomous and semi-electric vehicle. Working with a business, a concept and a prototype of a special purpose vehicle characterised by fast movement on a rugged terrain were created. Another interesting example of science and business cooperation was the development of a three-wheeled tilting vehicle. In order to build a unique hybrid of car and vehicle, the university provided its services for the start-up, which lacked competencies and infrastructure to create a new product.

After the presentation, there was a question from the audience regarding science and business cooperation and how it could be improved. In the case of Vilnius Tech, they are highly involved in various projects with private companies and believe that science and business cooperation is in a relatively good position. Yet, science and businesses in some cases have a lot of differences in

their goals and the language they use. Fundamentally, businesses often need technological solutions here and now, and researchers and academics tend to engage in deeper, more time-consuming research. Also, from the business point of view there is too little information about the potential to collaborate with science, business believe that it will take many resources and time to work together, there will be a lot of paperwork. On the other hand, scientists believe that they do not have anything to offer for business, they are too busy to work in other projects, other than their direct work in university and so on. Therefore, this is an area of potential improvement.